

Is *Acorus Calamus* native in the United States?

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Acorus Calamus L., commonly known as calamus or sweet flag which differs markedly from all our other Araceae in having linear erect equitant leaves, and in being aromatic instead of acrid, is generally treated in current manuals as native throughout the eastern United States, and occurring also in Europe and Asia. Its aromatic rootstock was formerly regarded as an important medicine, though its popularity was evidently waning as long ago as 1855, when John Darby said of it in his *Botany of the Southern States*: "It was anciently much more highly esteemed than at the present day." In the South it seems to be used mostly by negroes, and it is referred to in the "Uncle Remus" stories of two generations ago as a favorite condiment.

I do not have access to much botanical literature at present, but will quote a few statements about *Acorus* that I have found, which may be representative enough; taking them in chronological order.

Stephen Elliott, in his *Botany of South Carolina and Georgia* (1821) says of it: "Grows in wet places, around ponds, etc., near settlements; naturalized but scarcely indigenous."

William Darlington, in his *Flora Cestrica* (i.e., of Chester County, Pennsylvania) (1837) says: "Swampy meadows; about springheads; frequent. . . . Our American Botanists speak of it as being undoubtedly indigenous; but I have never seen it where it did not appear like an introduced plant."

Darby, in the book above referred to, gives its distribution only as "wet places." He was living at the time in Auburn, Alabama, and may have seen the plant in that vicinity.

A. W. Chapman, in his *Flora of the Southern United States* (1860), says of *Acorus*: "Wet places, Florida, and northward, apparently introduced."

F. P. Porcher, in his *Resources of the Southern Fields and Forests* (1863), says: "Diffused in bogs and morasses; I have collected it in Fairfield and in Charleston districts" (now counties, in South Carolina). He devotes about a page to its medicinal properties, citing several authorities who had written about it.

Alphonso Wood, in his *Class Book of Botany* (various editions, around 1870), says: "Grows in wet soils throughout the United States."

Britton and Brown, in the first volume of their illustrated *Flora* (1896), give the habitat of *Acorus* as "In swamps and along streams," with a range from Nova Scotia to Minnesota, Louisiana and Kansas, also in Europe and Asia. They make the interesting observation that "In our territory fruit is rarely, if ever, found."

Gattinger, in his *Flora of Tennessee* (second edition, 1901), says of it: "E. Tenn. Perhaps from imported stock. Cultivated here and there."

Mohr, in his *Plant Life of Alabama* (1901), gives its general distribution elsewhere, and then says: "Scattered over the State. Border of swamps. Mobile and Montgomery counties." There is no hint that it may not be indigenous, and the same idea prevails in Small's *Flora of the Southeastern United States* (1903), and his *Manual of the Southeastern Flora* (1933). Millspaugh, in his *Flora of West Virginia* (1913), cites seven stations for it, with no intimation that it might not have been there always.

It may be noted that several of the writers previous to the Civil War were skeptical about its being indigenous, but less skepticism seems to have been expressed since; as if the plant was gradually making itself more at home, so to speak.

My own experience with the species in question began about the "turn of the century," when I used to see it frequently in wet meadows in central Massachusetts, and a few years later in one or two similar places on Long Island. In such places its associates were practically all supposed native species, though there is some reason to believe that the meadows themselves, or some of them, occupy sites from which swampy forests were cleared away by the early settlers.¹

I never encountered it anywhere in the South until I came across a patch covering several square yards in a marshy place near some negro houses near the Warrior River in Tuscaloosa, Alabama, on June 1, 1928. But as it grows in dense colonies in wet places, and has leaves similar in size and shape to those of several species of *Iris* (though a little greener than most *Iris*es),

¹ See *Torreya*, 16: 269-270 (footnote). Jan. 1917.

it could easily be mistaken for an *Iris* at a little distance, especially at seasons when the latter is not in bloom. And I may thus have overlooked it in all my car-window botanizing (which has extended into or through about one-third of the counties in the United States and a few in Canada).

It happens that not long after I found it in Tuscaloosa one of the Birmingham papers started a series of daily articles (anonymous) on Alabama plants; and the very first one, on September 10, 1928, dealt with "Calamus, or sweet flag, as it is commonly called by natives of Alabama, where it is found growing abundantly in the swampy sections of the state." The article consisted mostly of folk-lore relating to the plant, beginning with the Bible, and referring to India, and some early customs of American Indians.²

As soon as possible I wrote a letter to the paper, challenging the statement about the abundance of calamus in Alabama, and asking if any readers knew of localities for it. That brought a few prompt replies (one from a correspondent about 75 miles away reaching me the same day my letter was published), the gist of which was that each writer knew of the occurrence of the plant long ago in one or two localities. It should be mentioned here that in a copy of Darby's Botany that belonged to Dr. Eugene A. Smith there is a marginal annotation for *Acorus Calamus*, "Ala.," which evidently means that he had seen it somewhere in the state in the 70's, possibly in Tuscaloosa, where I did many years later.

I left Alabama a few days after the inquiry just mentioned, and did not return to the state to work for three years, or do much botanizing again until 1933. After that I located a few more stations for *Acorus*. On May 17, 1934, I saw a small patch of it, in bloom, in the western edge of Athens, Limestone County, close to buildings and in pretty weedy surroundings, as in Tuscaloosa six years before. On April 16, 1935, I collected it in a marshy pasture about $\frac{1}{2}$ mile west of Stevenson, Jackson County. A man who came along at that time to see what I was up to suggested that the plants may have washed down from

² In a History of Agriculture in the State of New York, U. P. Hedrick, 1933, Sweet flag—*Acorus Calamus*—is given in the list of Indian food and industrial plants in the section "Native plants, used but apparently not cultivated." (Editor.)

some negro houses which were plainly visible across the railroad. A letter received quite recently from Mrs. Lillian V. Porter, an amateur botanist of Chattanooga, Tenn., whom I had told about this find, states that she had a cook who came from a negro settlement a few miles from Stevenson, and said the people there cultivated the calamus ("calomel root," as they called it), and used it medicinally. A few plants that I saw along a partly shaded small stream in the western edge of Hamilton, Alabama, on June 2, 1936, were said to have been planted there by negroes.

During a visit to Atlanta at the end of October, 1936, while most of this article was in the hands of the editor or printers, I picked up an interesting bit of evidence. A friend who helped me verify the "Uncle Remus" reference (dimly remembered after more than forty years) in his collection of Georgia books, asked his negro cook if she knew anything about calamus. She replied that she had some of it growing in a box on her back porch; and she brought a leaf the next morning for verification.

When once established the plant seems to propagate indefinitely by rootstocks, and that doubtless explains why it seldom fruits, as noted by Britton and Brown. The same tendency is exhibited by numerous other plants.

As for its distribution in states adjacent to Alabama, Gattinger's observations in Tennessee have already been quoted. I have been in every county in Georgia but one, without ever seeing it there, but could have overlooked it, as previously suggested. The author of "Uncle Remus," who seems to have been familiar with the plant, lived in Georgia all his life, and may have known of one or more localities for it, wild or cultivated. Wood and McCarthy listed it in their Wilmington (N. C.) flora, 1887, but without comment.

Chapman's report of it from Florida may have been authentic, though he did not specify any locality, and it does not seem to have been confirmed by any recent observations. Dr. E. N. Lowe, in his *Plants of Mississippi* (Miss. Geol. Surv. Bull. 17. 1921), says of it: "In ponds, South Mississippi (Wailes). Lafayette Co."

It would be interesting to have testimony from others who may have seen acorus anywhere in the United States where it appears to be indigenous, or who have reliable records of its

intentional or unintentional introduction, with approximate dates. Some detailed notes on its distribution and habitat in the Old World, and on the other species which is said to grow in Japan, would also be valuable. If our plant grows in India it may also in Africa, and the ancestors of our negroes may have become acquainted with it there.

Most introduced and cultivated plants prefer comparatively dry soils, that have been or could be tilled; but there are a few other plants indigenous to Europe whose American habitat is similar to that of *Acorus*, and which may have had a similar history. The well-known mints, *Mentha piperita* and *M. spicata*, grow spontaneously in marshy places in all or nearly all the eastern states, but are said to have been introduced from Europe. Like the calamus, they are cultivated in some places for their aromatic properties.

The water-cress, called at various times *Nasturtium officinale*, *Roripa Nasturtium*, and *Sisymbrium Nasturtium-aquaticum*, appears perfectly at home in many of our limestone springs and the streams issuing from them, but is said to be of Old World origin. Like the mints, it is a commercial crop in some places.

Of similar habitat to the *Acorus*, but with more restricted range, and no known economic properties, is *Lythrum Salicaria*, a showy plant of wet meadows in some of the northeastern states and Canada, appearing like a native, but believed to have been naturalized from Europe.

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